

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of: )  
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Digital Audio Broadcasting Systems ) MM Docket No. 99-325  
And Their Impact on the Terrestrial )  
Radio Broadcast Service )

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**Comments of Reunion Broadcasting, L.L.C.**

The following comments are filed by the undersigned in response to the Commission’s request for comments on “In-Band/On Channel Digital Radio Broadcasting Standard, NRSC-5”, public notice DA 05-0661. While the proposed standard impacts FM as well as AM broadcasters, these comments are limited to the impact of the proposed standard on existing and future AM operations.

**The Proposed NRSC-5 Standard Cannot Legitimize Increased Interference to Existing Stations.**

Throughout this proceeding, Reunion has supported the rapid deployment of spectrum efficient digital broadcasting in the AM band. However, Reunion respectfully objects to the proposed NRSC-5 standard to the extent that AM operation under the proposed standard would result in increased interference to existing stations.

Somewhere in this proceeding, the cart has overtaken the horse. In haste to introduce new technology, someone, somewhere, has persuaded policy makers that the proposed iBiquity “IBOC” system produces sufficient benefits to outweigh the significant interference it introduces into adjacent AM channels. In the initial order authorizing interim hybrid operation, the Commission apparently acknowledged the increased interference that hybrid operation would

cause, but concluded that the benefits presented by IBOC operation would outweigh the increased interference. Insofar as AM operation is concerned, this is not the case. The promise of “near FM” quality in a limited service area is not worth the increased interference on the band. AM stations already have the potential to deliver “near FM” quality to listeners with all but the poorest quality receivers.

Further, the argument that the AM digital signal is more robust than the analog signal is a fallacy. Loss of one sideband can cause the digital receiver to revert to analog (and 5 kHz analog at that) while loss of a portion of the analog signal can usually be compensated for by the receiver’s AGC circuit. Analog AM can deliver a high quality stereo signal. Can an IBOC system operating under the proposed NRSC 5- standard do the same at an acceptable bit rate?

The promises of “enhanced performance” under the proposed standard simply do not justify the increased interference that would burden the band.

**AM Operation Under the Proposed Standard Violates Existing Allocation Standards.**

Reunion acquires AM broadcast properties and seeks to enhance those properties by maximizing the signal, within the Commissions existing rules, so that service to the public is enhanced. We are not alone in this endeavor. The last AM major change window demonstrated a huge number of new applications. The AM band is not dead.

Anyone familiar with the AM allocation rules knows that one of the most significant limiting factors in the expansion of a station’s service area arises as a result of adjacent channel stations. Allocation rules have changed over time, and as a result, there are areas of significant “grandfathered” contour overlap. Digital operation by one or more of the overlapping stations

effectively increases the amount of the signal overlap in direct contravention of the Commission's rules.<sup>1</sup>

The few existing AM IBOC stations in the United States have demonstrated the level of interference which results from using the existing *analog* NRSC mask in an attempt to legitimize hybrid analog/digital operation. As noted in prior comments in this proceeding, the NRSC mask was intended to deal with splatter resulting from analog broadcasting. At the time those rules were adopted, it was never contemplated that the mask would be filled with “always on” ODFM carriers. **Any attempt to utilize the proposed NRSC-5 standard to codify the introduction of another emission type into the existing AM analog mask is an improper attempt to extend the provisions of Section 73.44 beyond its intended scope and purpose.**<sup>2</sup>

Recently, a contributing engineer/columnist for Radio World suggested that it was time to “Thin the Herd” to make way for digital broadcasting. Acknowledging the increased level of interference that would result from IBOC operation, the author suggested that AM stations be given an incentive to “go dark” in order to make way so that “the stronger members can improve and become better prepared for survival”<sup>3</sup>

Just how can any of this serve the public interest, convenience and necessity? How can the reduction of existing service areas or the elimination of voices available to the public be construed to be in the public interest?

Reunion respectfully requests that the Commission undertake testing to measure and quantify interference to AM stations that can result from operation pursuant to the proposed standard. Justifying the standard as fitting within the analog mask is not enough. Subjective listening tests are not enough.

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<sup>1</sup> Section 73.37

<sup>2</sup> Section 73.44 specifically deals with “AM transmission system emission limitations.”

Measure the difference between the adjacent channel energy within the NRSC mask presented by a typical analog station and that introduced by the OFDM carriers of a station operating in the hybrid mode. Then, increase the power of the station operating in the analog mode to a level where the analog adjacent channel energy equals the adjacent channel energy presented by a station operating in the hybrid mode. Map the predicted contours at that power level. Does it fit within the existing allocation rules? No.

This leads to one obvious conclusion: **Stations operating in the hybrid mode described in the proposed standard should be required to reduce power to the point where the energy introduced into adjacent channels does not exceed that introduced by analog operation.**

Unless conversion is mandated by the Commission, analog operation on the AM band will be here for years to come. The existing IBOC system simply provides insufficient benefits to induce many broadcasters to convert their operation from analog to digital. Some broadcasters, while desiring to convert to IBOC operation under the proposed standard will be unable to do so simply because of the substantial plant improvements required to transmit an acceptable signal. In short, analog stations will continue to serve a large portion of the United States listening public for the foreseeable future. Existing and future analog stations should be protected from increased interference. Failure to do so is a failure to protect the public interest.

### **Conclusion and Request for Relief**

For the reasons stated above, Reunion respectfully requests that the Commission not adopt the proposed “NRSC-5” standard to the extent that it applies to AM operation. The proposed standard is silent as to interference which would occur from proposed operations. Rather, Reunion requests that the Commission entertain a proposed standard which contains a

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<sup>3</sup> Radio World Online, Guy Wire “Let’s Save the AM Band”, May 24, 2005.

mechanism for stations seeking to operate utilizing the iBiquity IBOC mode to reduce power to the extent that the adjacent channel energy introduced is equivalent to that introduced by analog operation.

Respectfully requested,

D. Stanley Tacker, Esq.